RAYTHEON

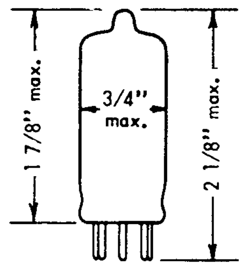
TECHNICAL INFORMATION

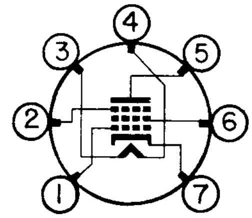
PENTODE

TYPE CK6485

Excellence in Electronics

The CK6485 is a heater-cathode type, high transconductance, sharp cut-off pentode of miniature construction designed for use as a wide band or IF amplifier. It will maintain its emission and freedom from excessive cathode interface resistance even after long periods of operation under cut-off conditions. The CK6485 is otherwise identical with the 6AH6.





BOTTOM VIEW

7BK

MECHANICAL DATA

ENVELOPE: T-5½ Glass

BASE: Miniature Button 7-Pin

TERMINAL CONNECTIONS:

Pin 1 Grid #1	Pin 5 Plate
Pin 2 Grid #3	Pin 6 Grid #2
Pin 3 Heater	Pin 7 Cathode
Pin 4 Heater	

MOUNTING POSITION: Any

ELECTRICAL DATA

DIRECT INTERELECTRODE CAPACITANCES: ($\mu\mu fds.$)

	Unshielded	Shielded ●	
Grid #1 to Plate: (g1 to p)	0.030	0.020	max.
Input: g1 to (h+k+g2+g3)	10	10	
Output: p to (h+k+g2+g3)	2.0	3.6	

DESIGN CENTER MAXIMUM RATINGS:

Heater Voltage	6.3	volts
Plate Voltage	300	volts
Grid #2 Voltage	150	volts
Plate Dissipation ▲	3.2	watts
Grid #2 Dissipation	0.6	watt
Cathode Current	25	ma.

CHARACTERISTICS AND TYPICAL OPERATION:

	Pentode Connected	Triode Connected	
Heater Voltage	6.3	6.3	volts
Heater Current	0.45	0.45	amp.
Plate Voltage	300	150	volts
Grid #2 Voltage	150	⊕	volts
Cathode Resistor	160	160	ohms
Plate Resistance	0.5	.0036	meg.
Transconductance	9000	11,000	μmhos
Amplification Factor		40	
Plate Current	10	12.5	ma.
Grid #2 Current	2.5		ma.
Grid #1 Voltage for Ib=10 μa. (approx.)	-7	-7	volts
Transconductance (Grid #3-Plate)	♦		

● *Using JETEC Shield #316 connected to cathode.*

▲ *At maximum ratings, it is necessary that at least one surface of the shield, if used, be blackened.*

♦ *Grid #3 has practically no control characteristic and it is not intended to be used as a control electrode. Its transconductance to the plate approximates 2 micromhos and the mu is 0.7 to 1.0.*

⊕ *Grid #2 and Grid #3 tied to plate.*

Tentative Data

RAYTHEON MANUFACTURING COMPANY

RECEIVING AND CATHODE RAY TUBE OPERATIONS

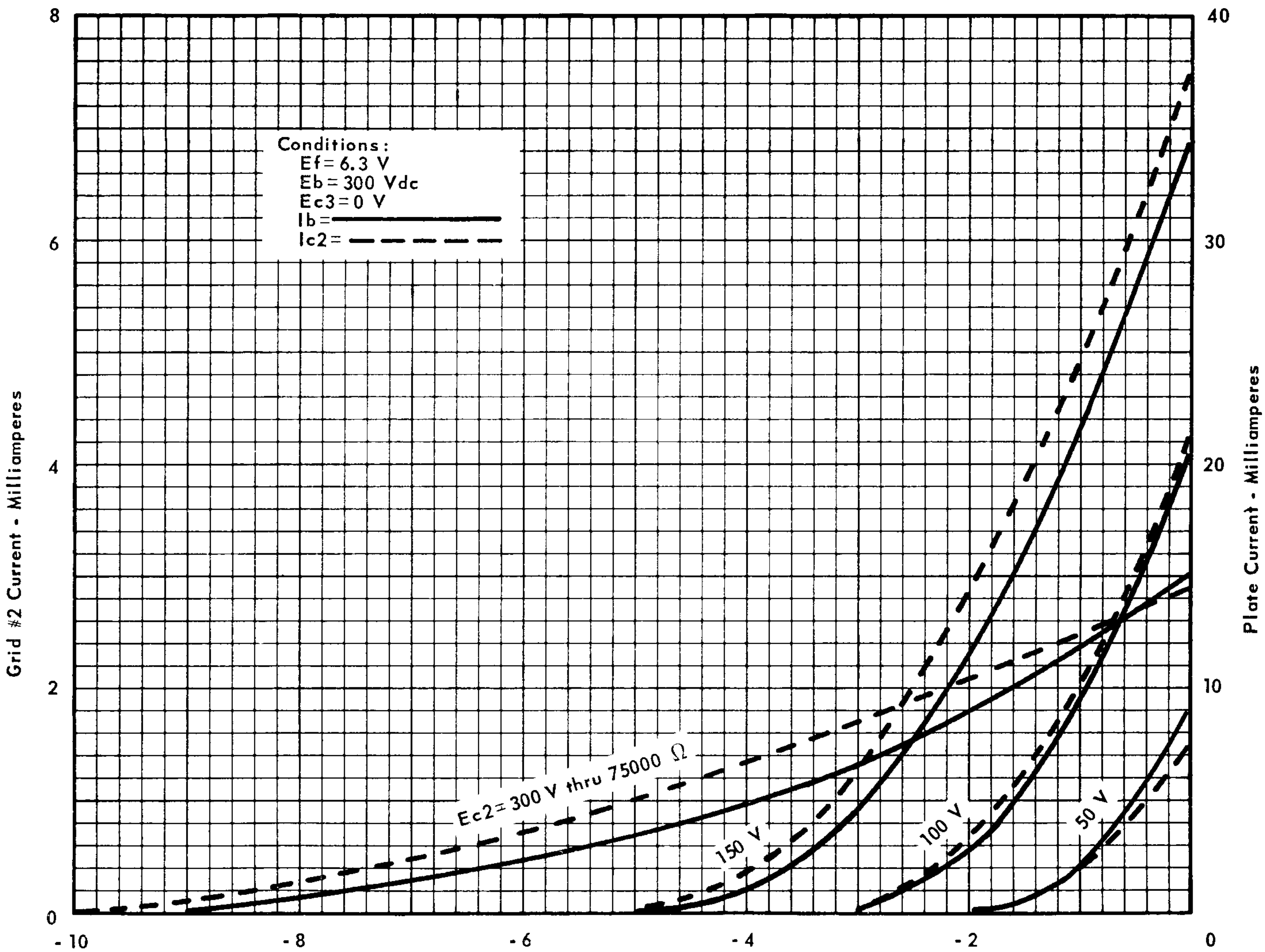
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PENTODE

Input Coupling and Sync. Polarity	Output Volts P/P	Voltage Gain	Max. Watts Dissipation Screen	Plate	Cathode Resistor Ohms	Cathode Current No Sig. (ma.)	With Sig. (ma.)	Grid Resistor Ohms
DC –	66	22	0.6	3.2	39	20	13	5000
DC +	100	25	0.4	3.2	270	8	15	5000
AC –	100	25	0.6	3.2	39	20	21	1 meg.
AC +	100	25	0.6	3.2	39	20	18	1 meg.

All data taken with Screen voltage of 150 and Plate load of 4000 ohms with typical on-the-air television signals and average production tubes.

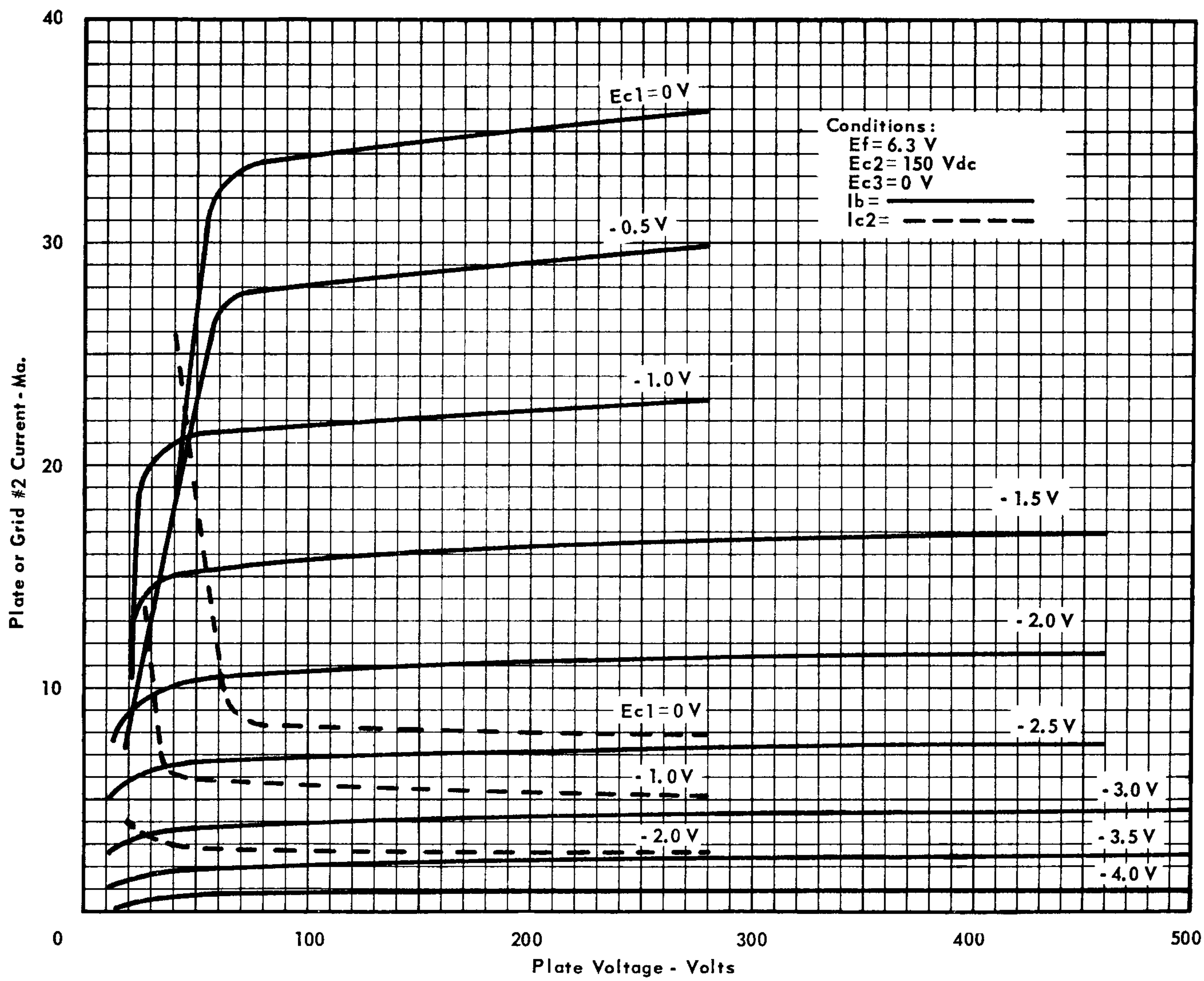
AVERAGE CHARACTERISTICS



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AVERAGE PLATE CHARACTERISTICS



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AVERAGE CHARACTERISTICS

